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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/761,661

01/18/2001

Patrick Bachinger

1748X/49451

5763

7590

11/20/2003

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300

EXAMINER

DOROSHENK, ALEXA A

ART UNIT

PAPER NUMBER

1764

DATE MAILED: 11/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/761,661

Applicant(s)

BACHINGER ET AL.

Examiner

Alexa A. Doroshenk

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 2, 3, 5 and 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 1/18/01 and
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8/14/02
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Information Disclosure Statement

1. The item listed on line AR of the IDS filed August 14, 2002 as "Search Report" has been reviewed by the examiner but will not be listed on a published patent.

Claims Analysis

2. In order to enhance the clarity of the file record as to the scope of the claims and interpretation of limitations the following analysis has been applied to claims 8-10. The preambles of claims 8-10 set forth intended use because these preambles only state a purpose without adding any structure. Therefore the preambles of claims 8-10 are not given any patentable weight and it is noted that these claims do not impart any further structural limitations over that of claim one.

Claim Objections

3. Claims 2, 3, 5 and 6 are objected to because of the following informalities: Applicant has stated in claim 1, line 17, that there is "a nonwoven material". It is suggested that applicant amend the objected claims to add the word "material" after each recitation of "nonwoven" to provide further clarity to these claims. Appropriate correction is required.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "additional catalyst material" "arranged in the first part-chamber" (of claim 7) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 4, 6 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Gieshoff et al. (5,934,073).

With respect to claims 1 and 8-10, Gieshoff et al. discloses an apparatus (see fig. 2) for treating a fluid medium comprising:

a first inner chamber (6);

a second, outer chamber (1');

a catalyst-containing region (4') in the flow path of the medium, between the first (6) and second (1') chambers and having the medium flowing through the catalyst (4') (col. 6, lines 22-26);

the first chamber (6) is surrounded at least partially by the second chamber (1') (see fig. 2);

the catalyst-containing region (4') forms a partition between the first (6) and second (1') chambers (col. 6, lines 26-29); and

the partition comprises a nonwoven material with a catalyst material embedded therein (col. 4, lines 20-39).

With respect to claim 2, Gieshoff et al. illustrates (figure 2) wherein the first (6) and second (1') chamber are coaxially arranged tubes; the innermost tube (6) is closed off (13) with respect to the outer tube (1') at an end which projects into the outer tube (1') (col. 6, lines 29-32); and at least part of the circumference of the projecting tube section (6) is formed by the nonwoven (4') material (col. 6, lines 19-21).

With respect to claim 4, Gieshoff et al. further discloses wherein the first chamber (6) forms a feed (2') for medium into the apparatus (col. 6, lines 22-26).

With respect to claim 6, Gieshoff et al. discloses wherein the nonwoven (4') comprises a honeycomb monolith with alternatingly plugged flow channels (col. 4, lines 25-28).

7. Claims 1- 4 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Tourtellotte et al. (3,736,105).

With respect to claims 1 and 8-10, Tourtellotte et al. discloses an apparatus (see fig. 1) for treating a fluid medium comprising:

- a first inner chamber (3/4);

- a second, outer chamber (13);

- a catalyst-containing region (7) in the flow path of the medium, between the first (3/4) and second (13) chambers and having the medium flowing through the catalyst (7) (col. 2, line 64- col. 3, line 71);

the first chamber (3/4) is surrounded at least partially by the second chamber (13) (see fig. 1);

the catalyst-containing region (7) forms a partition between the chambers (see fig. 1); and

the partition comprises a nonwoven material with a catalyst material embedded therein (col. 3, lines 20-26).

With respect to claim 2, Tourtellotte et al. illustrates (figures 1 and 2) wherein the first (3/4) and second (13) chamber are coaxially arranged tubes; the innermost tube (3-4) is closed off (23) with respect to the outer tube (13) at an end which projects into the outer tube (13); and at least part of the circumference of the projecting tube section (3/4) is formed by the nonwoven (4/7) material (col. 3 lines 3-21).

With respect to claim 3, Tourtellotte et al. further discloses wherein the first (3/4) and second (13) chambers are arranged coaxially with respect to one another (see fig. 2); the first chamber is of a conical form (fig. 1 and 3-5) which projects into the second chamber (13); and at least part of the circumference of the tube (where the openings in 4 occur) is formed of by the nonwoven catalyst (7).

With respect to claim 4, Tourtellotte et al. further discloses wherein the first chamber (3-4) forms a feed for medium (2) into the apparatus (col. 2, lines 64-70).

With respect to claim 7, Tourtellotte et al. discloses additional catalyst material (11) arranged with respect to the first chamber (col. 3, lines 28-63).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gieshoff et al. (5,934,073) in view of Santala et al. (3,953,176).

Gieshoff et al. discloses an apparatus as described above as well as discloses that the apparatus can be used in the automotive art (abstract). Though Gieshoff et al. fails to explicitly disclose a catalyst which is of a folded and undulating form, Gieshoff et al. does teach, with regard to the exhaust treatment catalyst, that "all embodiments known from the state of the art are suitable" (col. 4, lines 20-21).

Santala et al. teaches an automotive exhaust treatment catalyst (col. 1, lines 3-10)(as seen in figure. 8) which is of a corrugated form (which reads on folded and undulated) as well teaching that this catalyst embodiment has an economical advantage (col. 6, line 41- col. 7, line 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the catalyst formation of Santala et al. in order to meet the requirement of Geishoff et al. to have a suitable catalyst for exhaust treatment in the apparatus as well as such a catalyst selection provides an economical advantage, as taught by Santala et al.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexa A. Doroshenk whose telephone number is 703-305-0074. The examiner can normally be reached on Monday - Thursday from 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 703-308-6824. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

After December 10, 2003, please note that the examiner can be reached at her new phone number 571-272-1446 and the examiner's supervisor, Glenn Caldarola, can be reached at his new phone number 571-272-1444.



Alexa Doroshenko
Patent Examiner
Art Unit 1764

November 13, 2003